

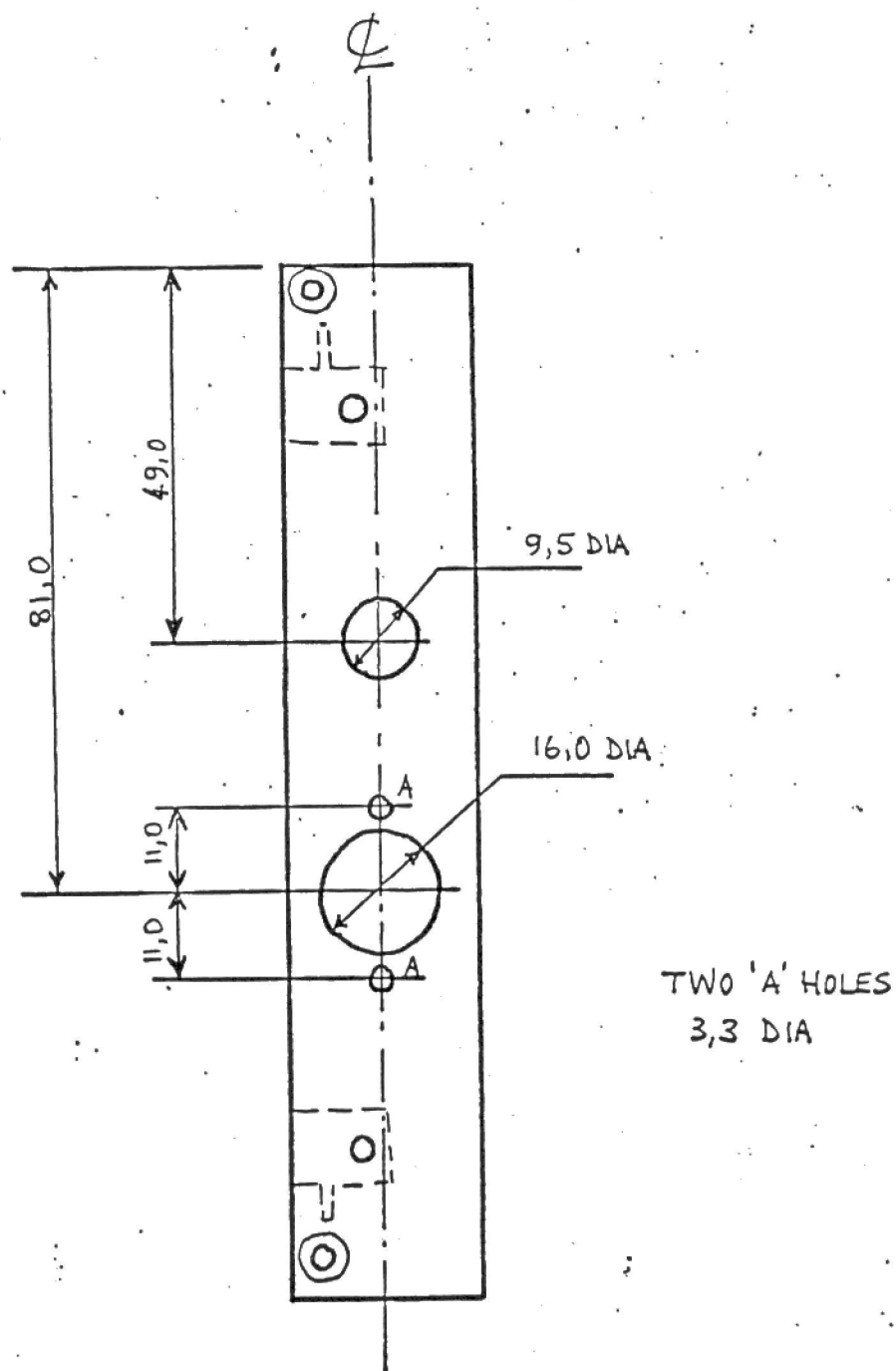
MXPSG-2 8206

PROTOTYPE

PSG-2 CIRCUIT.

(Dual Programmable Sound
generators for Interak 1)

____ Interak ____



NOTE . OLD STYLE CARD FRONT SHOWN
ADJUST DIMENSIONS FOR NEW STYLE

Drwn D.M.P
Date 9-6-81
Scale 1:1
Dms mm.

Greenbank Electronics
PSG-2 FRONT PANEL

LATCH ADDRESS

ADDR

IORQ

WRITE DATA

READ DATA

Drwn DMP

Date 22.6.82

Scale

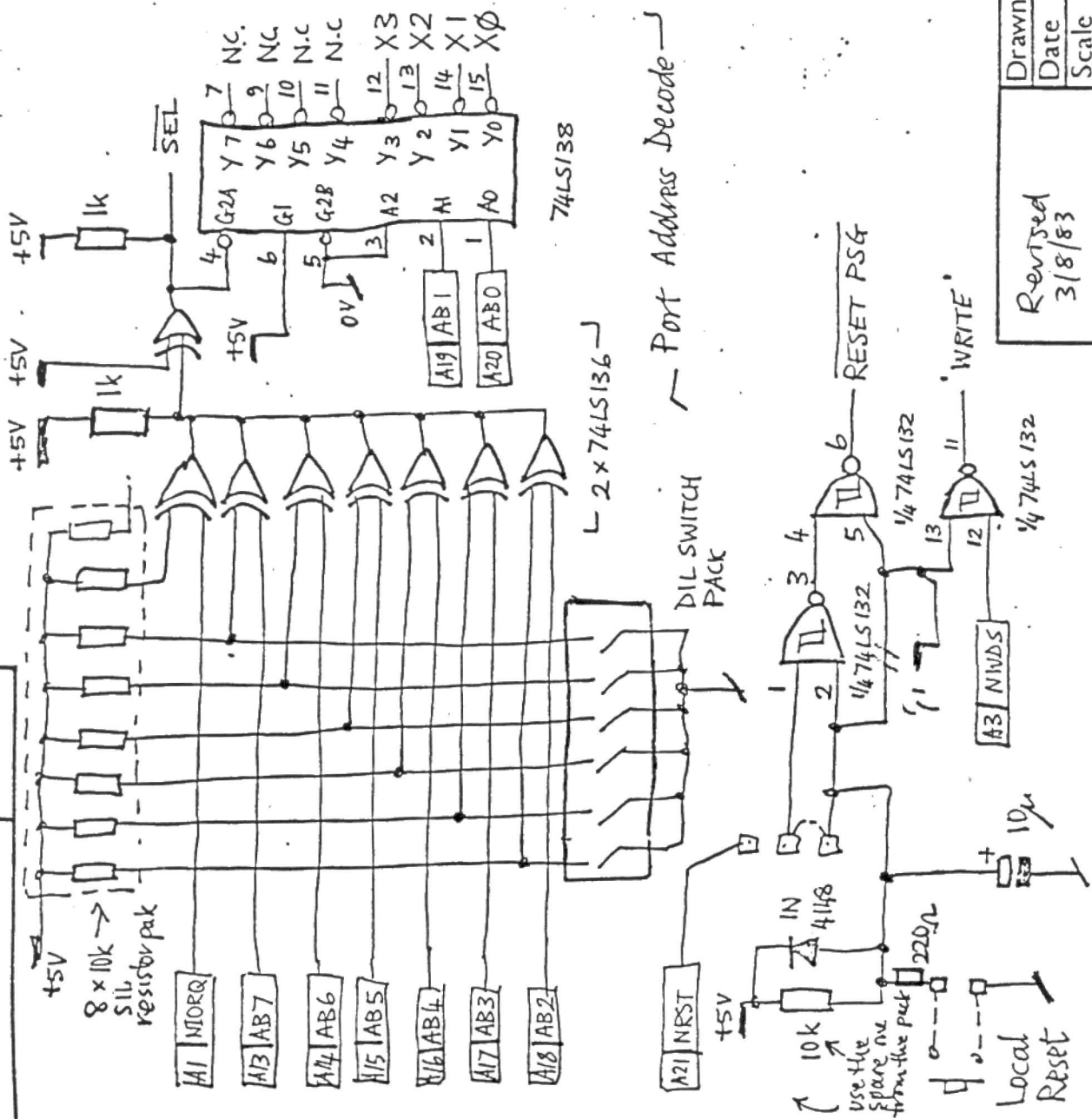
Greenbank Electronics

PSG-2 TIMING DIAGRAM
(Z80)

PORT ADDRESS DECODING
(EXAMPLE 'X' = 'C')

7654	32
1100	00

WR	RD	I/O ADDR	FUNCTION
0	1	C0	PSG-1 LATCH ADDRESS
0	1	C1	PSG-1 WRITE DATA
1	0	C1	PSG-1 READ DATA
0	1	C2	PSG-2 LATCH ADDRESS
0	1	C2, C3	PSG-2 WRITE DATA
1	0	C3	PSG-2 READ DATA



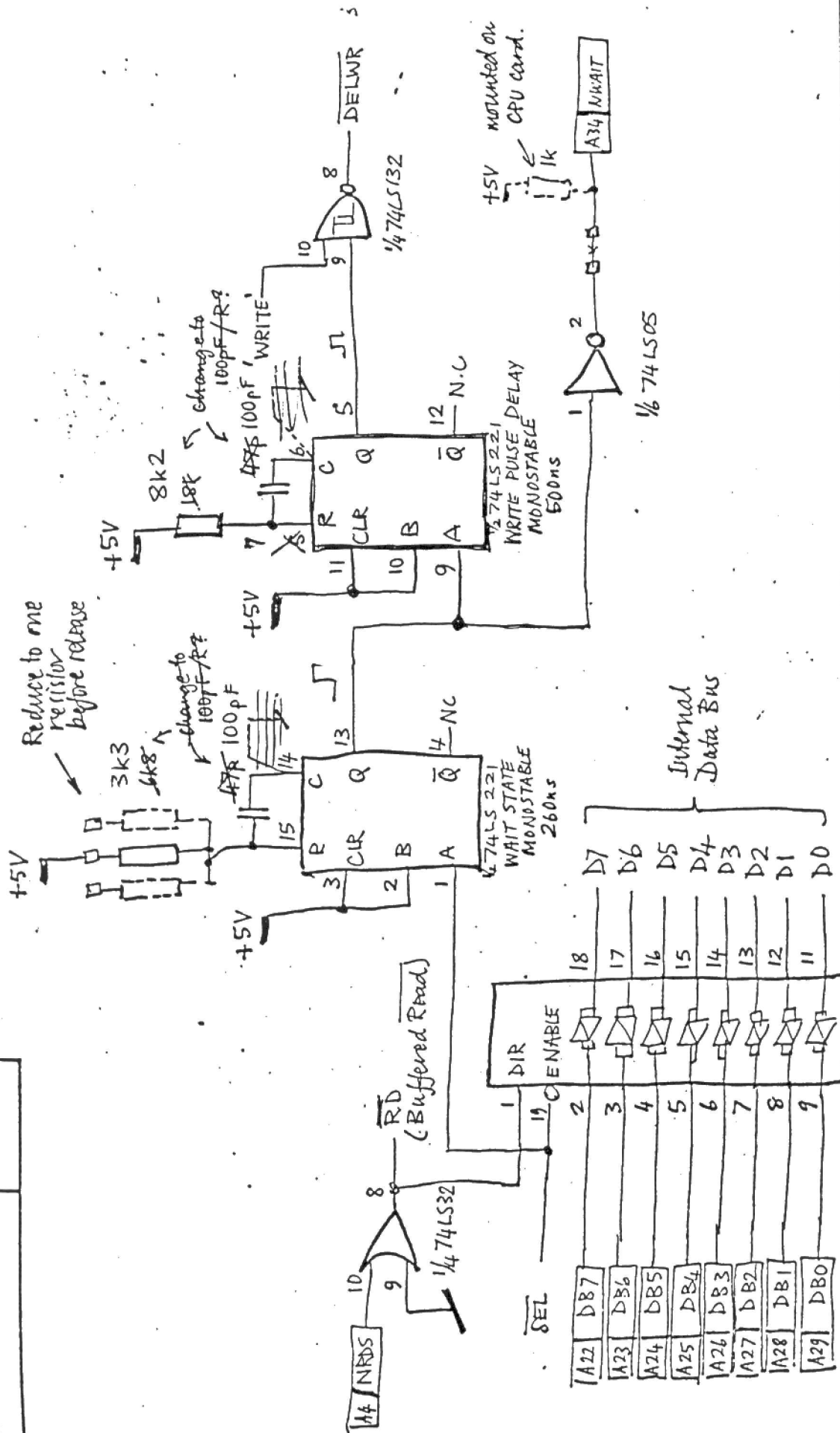
Port Address Decode

Revised
3/8/83

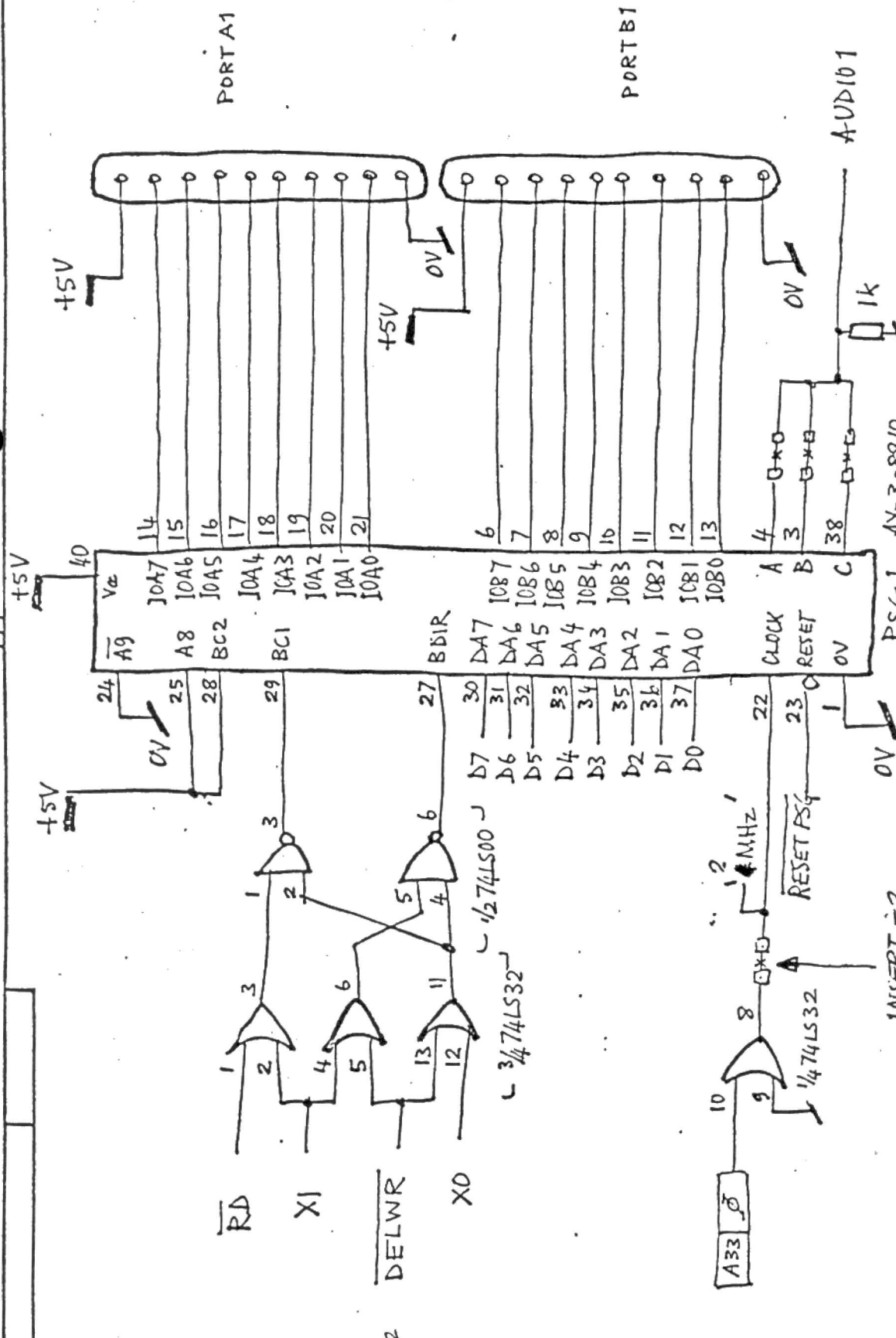
Drawn DMP
Date 19-6-82
Scale

Greenbank Electronics

PSG-2

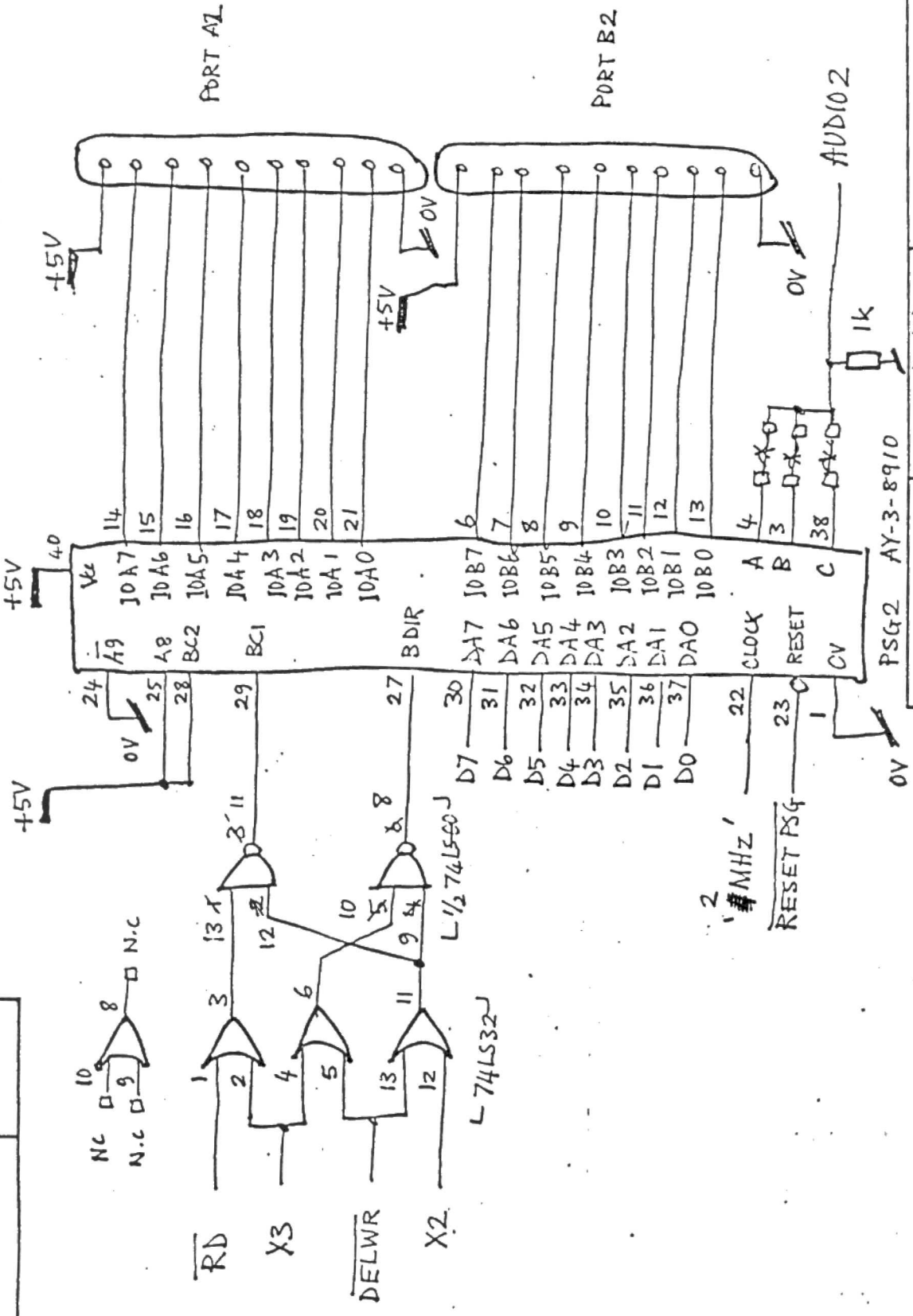


Revised.		Greenbank Electronics	
3/8/83		PSG-2	
Q 19/11/84			
Drawn DMP			
Date 12.6.82			
Scale			
		2	



PSG 1 AY-3-8910		Greenbank Electronics	
MOD 19/11/84		PSG-2	
Drawn DMP		Date 12.6.82	
		Scale	
		12.3	

INSERT ÷2
CIRCUIT HERE
-MAX FREQ FOR '8910
IS 2MHz



Greenbank Electronics

PSG-2

Drawn DAP

Date 19-6-82

Scale

PSG2 AY-3-8910

1k

0V

2 MHz

RESET PSG

1

0V

23

0V

0V

1

0V

0V

1

0V

0V

1

0V

COMPONENT PRICE LIST FOR XPSG-1 CIRCUIT
(Prices exclude VAT)

List Ref: XPSG-1/P3
October 1982, Revised July 1985

Prices each, ex. VAT

Resistors 0.25W (Except where stated)

CR2510R	1	XR	0.02	0.02
CR1W10R 1W	1	XR	0.10	0.10
CR25220R	2	XR	0.02	0.04
CR251K0	4	XR	0.02	0.08
CR253K3	1	XR	0.02	0.02
CR258K2	1	XR	0.02	0.02
CR2510K	2	XR	0.02	0.04
CR25100K	1	XR	0.02	0.02

SIL Resistor (Use 8-pin SIL Socket)

SIL8-10K	1	XSIL1	0.26	0.26
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Front Panel Log Pot

LOG10K	1	XRv1 panel mounting	0.60	0.60
	<u>15</u>	Resistor Pack RXPSP1	<u>1.20</u>	1.20

Capacitors

("MAL" = Miniature Low Leakage Aluminium Electrolytic, "ELEC" = Radial Lead Aluminium Electrolytic; "CER" = Ceramic; "DEC" = 47n-100n Decoupling grade polyester, or Ceramic)

CER100P	2	XC	0.05	0.10
DEC	10	XC	0.09	0.90
MAL10U	4	XC	0.07	0.28
ELEC100U	3	XC	0.10	0.30

Capacitor Pack CXPSG1 1.58 1.58

Diodes

IN4148	1	XCR1	0.04	0.04
	<u>1</u>	Diode Pack DXPSG1	<u>0.04</u>	0.04

Quartz Crystal

Not used on XPSG-1			0.00	
		Quartz Crystal	<u>0.00</u>	0.00

Integrated Circuits (Use Sockets)

74LS00	1	XU	(14 pin)	0.36	0.36
74LS05	1	XU	(14 pin)	0.36	0.36
74LS32	2	XU	(14 pin)	0.36	0.72
74LS132	1	XU	(14 pin)	0.62	0.62
74LS136	2	XU	(14 pin)	0.41	0.82
74LS138	1	XU	(16 pin)	0.54	0.54
74LS221	1	XU	(16 pin)	1.62	1.62
74LS645	1	XU	(20 pin)	1.52	1.52
AY-3-8910	2	XU	(40 pin)	4.75	9.50
LM 386	1	XU	(8 pin)	0.90	0.90

Integrated Circuit Pack ICXPSG1 16.96 16.96

DIL Switch

DILSW8	<u>1</u>	S1	(16 pin)	1.50	<u>1.50</u>	
	1		DIL Switch Pack SWLKP1	<u>1.50</u>	1.50	1.50

DIL & SIL Sockets (None included for links)

9SCON SIL	1	XSIL1	0.06	0.06
DIL8	1	XU	0.08	0.08
DIL14	7	XU	0.10	0.70
DIL16	4	S1,XU	0.10	0.40
DIL20	1	XU	0.22	0.22
DIL40	2	XU	0.30	0.60

DIL & SIL Socket Pack SKXPSG1 2.06 2.06

Continued Overleaf

Sundry

DINCHSPKR DIN Spkr Socket	1	1.50	
Internal Loudspeaker	-	- not available -	0.00
		Sundry Pack SYXPSG1	<u>1.50</u> 1.50

Total cost of kit of all parts listed so far: PXPSPG1 24.84

OPTIONS (i.e. Items not included in standard kit of parts)

Prices each, ex. VAT

XPSG-1 p.c.b. Not in manufacture yet Suggest DIP-1 Meanwhile
BDIP1 10.95

Circuit diagram (Zero Rated for VAT) 0.50 0%

(No Manual is to be prepared yet for this card)

1" Card Front Kit, inc fixings and mtg. brackets, new type	CF1	2.99
ditto, old (RS) type	OCF1	3.99
2" Card Front Kit, inc fixings and mtg. brackets, new type	CF2	3.92
ditto, old (RS) type	OCF2	4.91

M3 Fixings. Generally Steel, Posidriv)

Screws 10 mm Panhead Posidriv Screws	4 off
Serrated Washers	4 off
Nuts	4 off

Above items sold in packs containing 10 each screws, washers, nuts:
per pack M3-10 0.64

Add 50p handling charge to each order, and 15% VAT.

Greenbank Electronics,
92 New Chester Road,
New Ferry, Wirral,
Merseyside. L62 5AG

Telephone:- 051-645 3391

Access/Visa Welcome (no surcharges).